

**ABSTRACT**

A system for detecting fault conditions in an audio system is provided. The audio system includes a remote audio generation device connected to an amplifier unit through a wire harness. A remote audio generation device being, for example, a CD unit or DVD player located in the trunk of the vehicle. The system would detect fault conditions that might occur in the wire harness and optionally transmit a diagnostic signal to an audio system controller. The remote audio generation device includes an audio generation circuit, a switch, and a fault detection circuit. The audio generation circuit creates an audio signal from a transmission or stored media. Selectively coupling the audio generation circuit with a wire harness, the switch will isolate the audio generation circuit if a fault condition occurs. To detect the fault condition, a fault detection circuit monitors the audio output and provides a control signal causing the switch to decouple the audio generation circuit during a fault condition.